

indeed in existence, but AT&T was not actively promoting it. In fact, a colleague of mine had to badger an AT&T service representative into revealing the fact that it was available.

Therefore the plan hardly warranted my attention. Now that AT&T is voluntarily telling customers about the plan, perhaps someday enough customers will take the plan that it will significantly affect AT&T's average revenue per minute. Only then will it have become relevant according to the measure that Professor Hall himself advocates should be used to evaluate rate changes.

32. On the other hand, with its \$4.95 per month subscription fee, AT&T's One Rate Plus plan is certainly not for low-usage customers. For instance, for a typical customer with less than 100 minutes of use per month, the original One Rate plan is less costly. Further, for a typical customer with monthly usage of 50 minutes or less, even basic rates would be less costly than the One Rate Plus plan. Thus, Professor Hall is wrong when he says "One Rate Plus is a sure bargain for any of the subscribers considered by Professor Schmalensee on pages 9 and 10 of his affidavit." (Hall, ¶ 206)

33. Professor Hall dismisses evidence that rates are higher than costs for low-usage customers by saying, "In a competitive industry, prices to each class of customer will reflect the costs of serving the class, including the costs associated with adding a customer, even if those costs do not vary over the customer's usage." (Hall, ¶ 208) He ignores my evidence that, using AT&T data and his own data, there is a large group of customers for whom rates are higher than costs. (Declaration, ¶¶ 15-17) I used this evidence to help show that the current long distance market is not fully competitive for residential customers and thus entry by a strong competitor such as BellSouth would either reduce long distance prices or improve the value that customers receive. Instead of refuting the point with evidence, he uses the circular argument that rates cannot be higher than costs because he assumes the long distance market is competitive.

34. Professor Hall also fails to explain a quandary. On the one hand, as I mention above, he asserts that rates for each class of customers equal the costs of serving each class. In 1996, 62 percent of AT&T customers faced full basic rates. In the BellSouth states, the average basic

rate for direct-dialed domestic calls was 18.9 cents per minute. According to his logic, then, it must have cost 18.9 cents per minute to acquire and serve those customers. Why, then, did AT&T suddenly decide it was profitable in early 1997 to offer its 15-cent-per-minute One Rate plan, for which all those customers would be eligible? Professor Hall gives no hint as to what suddenly reduced the costs of serving all those customers by 4.9 cents per minute. I suggest, to the contrary, that long distance carriers' costs did not suddenly drop by that amount in early 1997. Either revenues from those customers exceeded the costs of acquiring them and serving them, or AT&T feels confident that few of them will learn about and subscribe to the new One Rate plan, or both.

III. CARRIER ACCESS RATES ABOVE COSTS WILL NOT HARM COMPETITION

35. As I explained in my declaration, access charges are above costs. I also explained why that fact would not harm competition in the long distance market if BellSouth were to enter it; rather, BellSouth's entry would tend to reduce long distance prices and increase economic welfare. Several commenters appear not to understand this point, so I review the issue here.

36. Regarding this subject, I explained two points in my declaration. The first explanation was the invalidity of what I call the naïve price squeeze argument. An argument that some economists have often put forth on behalf of the incumbent long distance carriers has been the following: A vertically integrated RBOC would increase its access profits by taking toll minutes away from competitors. Therefore, entry by the RBOCs should be postponed until access charges are reduced to costs. My declaration showed that this argument is fallacious. (Declaration, ¶ 39-43) The reason for this conclusion is that every toll minute taken away from a competitor has an opportunity cost—foregone access revenue. I explained that the local exchange carrier might increase its profits if prices are above costs in the long distance market, but it would have this same profit incentive even if access rates were equal to costs.

(Declaration, ¶¶ 44) If prices are above costs in the long distance market, then entry is warranted and would increase welfare. Thus, there is no reason to postpone BellSouth's entry into the long distance market until it reduces access charges to cost. Fortunately, most of the

economists in this proceeding have avoided the fallacious naïve price squeeze argument. (Except see my discussions of Professors Hubbard and Lehr and of Professor Baumol below.)

37. My declaration also demonstrated that, since access charges exceed access costs, local exchange carrier entry into the long distance market would improve economic welfare: I explained that a local exchange carrier increases its access profits if demand for its access services increases. Thus, it has an incentive to have its long distance affiliate induce or force a decrease in the prices of long distance services. (Declaration, ¶¶ 45-47) Professor Hausman (on behalf of BellSouth) also makes this point. I would also argue that it would similarly have a profit incentive to improve quality or service or to introduce new services and applications; any such improvements would stimulate demand just as price decreases would.¹⁴ To help stimulate such demand increases, the local exchange carrier would want its long distance affiliate to charge lower prices, offer higher quality and service, and introduce more new services and applications than the affiliate might choose to do based on its own internal profit calculations. Since both access rates and long distance rates are currently above costs, the resulting demand expansion would increase consumer economic welfare and total economic welfare.¹⁵

38. As I discuss further below, several commenters appear to understand that the vertically integrated local exchange carrier would have a profit incentive to expand industry output. However, all of them (except Professor Schwartz ¶¶ 64-65) miss or ignore the point that such output increases would increase economic welfare. Therefore, they also miss the crucial point that follows from this finding: economic welfare gains from BellSouth's entry into the long distance market would be larger now—while access charges are still higher than costs—than such gains would be later when local competition competes down access prices closer to costs.

¹⁴ Any such improvements implemented through changes in access services would also be available to the long distance rivals.

¹⁵ I also reviewed an issue raised by Professor Franklin Fisher. He said that the local exchange carrier might expand even if it were less efficient than its rivals. I cited a paper showing that, for wide ranges of reasonable parameters, this potential inefficiency would be overwhelmed by the consumer welfare gain from expansion of demand. (Declaration, ¶¶ 46-47) None of the commenters refutes this finding.

(See, e.g., Baseman and Warren-Boulton, ¶ 63, where they say there is no significant social cost to waiting.) On behalf of consumers, there is urgency to BellSouth's entry.

A. Professors Baseman and Warren-Boulton Regarding Access Charges

39. Professors Baseman and Warren-Boulton understand that a local exchange carrier with a long distance affiliate will want to expand demand in the long distance market. (Baseman and Warren-Boulton, ¶ 30) They miss two important and related points following from that finding, however: First, they miss the point that the local exchange carrier's expansion of the long distance market improves economic welfare. Second, they misinterpret the local exchange carrier's incentives as an undesirable competitive advantage. In reality, as my discussion of the invalid naive price squeeze argument showed, the local exchange carrier gains no access profits if its long distance affiliate takes toll business away from a long distance competitor. Its only access profit gain comes from inducing customers to expand their usage relative to what they maintained under the competitor. The local exchange carrier gains just as much access profit whether its own affiliate receives the stimulated usage or whether a long distance competitor does so. Unless the margin between current long distance prices and marginal costs is substantial—which many of the commenters deny¹⁶—the local exchange carrier would make far more profit if its long distance rivals would all reduce prices and thereby expanded industry demand generally than it would if its own long distance affiliate merely took away some share of customers from its rivals and expanded only their demand. If, on the other hand, the margin between current long distance prices and marginal costs is substantial, then it would be economically efficient for the incumbent long distance carriers to lose some of their customers to another carrier which offers them greater value via expanded usage. That is what the competitive process is supposed to do.

¹⁶ See, e.g., Hubbard and Lehr, ¶ 83. Hall asserts that the incremental revenue from additional customers equals the incremental costs of obtaining and serving those customers. (Hall, ¶ 130) Professor Baumol asserts that current long distance prices are above incremental costs. (Baumol, ¶ 36)

40. From whatever source, the demand expansion improves economic welfare. As I discuss above, for residential customers at least, current rates exceed the long distance carriers' costs. In the face of price, service, or quality competition from a BellSouth long distance affiliate, I would expect the incumbent long distance carriers to shave their margins rather than to stand pat and lose a substantial portion of their residential business. From the point of view of consumers, this would be good news and would increase consumer welfare.

41. Oddly, Professors Baseman and Warren-Boulton accuse me of ignoring the argument that the local exchange carrier would want its affiliate to induce an expansion of long distance output. (Baseman and Warren-Boulton, ¶ 84) Yet my declaration explicitly dealt with the issue. (Declaration, ¶¶ 45-48) I can only assume that they overlooked my discussion of it. As I mention above, that expansion would increase economic welfare.

42. After divestiture and before interstate access price caps, AT&T also had a lower marginal cost of switched access than did its nascent competitors MCI and Sprint. Therefore, it could offer non-linear pricing plans with lower marginal prices than its competitors would have found profitable. It also could increase profits by migrating many of its large business customers from private line services to switched services. What caused AT&T's lower marginal cost of switched access was often referred to at the time as the "Brandon effect." After divestiture, the local exchange carriers had a fixed interstate revenue requirement for the carrier common line charge, independent of usage, and they were rate-of-return regulated.¹⁷ AT&T had almost the entire market for long distance service. In those circumstances, visualize AT&T's business case for a new optional toll calling plan with volume discounts. Such an offering would stimulate demand for toll service. To the same extent, it would increase the volume of access that AT&T bought from the local exchange carriers. Initially, AT&T's access bill would rise. But that would cause the local exchange carriers' revenues to exceed their revenue requirements, since that for the carrier common line was independent of usage. To

¹⁷ AT&T also lobbied hard to get the states to establish a fixed revenue requirement for state carrier common line charges.

prevent their rates of return from exceeding their costs of capital, the FCC would force them to reduce their carrier common line rates. Therefore, AT&T could anticipate that its bill for the carrier common line charge would fall back virtually to where it was before its new service offering. In other words, when AT&T had almost all of the long distance market, its marginal cost for the interstate carrier common line was near zero. (After AT&T lost market share and the local exchange carriers reduced the carrier common line charge, the Brandon effect still operated but with lesser force.¹⁸ It weakened further after the FCC instituted access price caps.) At the time, the FCC declined to interfere with AT&T's having artificially lower marginal costs, and AT&T lost market share regardless of its lower marginal costs of access. The implications of these observations are the following: if a carrier has artificially lower marginal costs than its competitors do, that situation will stimulate market growth; however, that situation has clearly not played a dominant influence in telecommunications markets to the disadvantage of competitors.

43. Professors Baseman and Warren-Boulton make another argument regarding access charges that makes no sense to me. They posit a knife-edge situation in which "access profits are close to the point where regulators would be inclined to reduce the access rate." (Baseman and Warren-Boulton, ¶ 30) In that situation, they claim that the local exchange carrier would *de facto* waive access charges to its long distance affiliate. Then, according to them:

Access profits go down as the affiliate takes business away from independent IXC's, thus removing the threat that regulators will force an across-the-board access price reduction. (Baseman and Warren-Boulton, ¶ 30)

44. That sentence appears to be based on ignorance of the way in which regulated operations occur. The long distance affiliate would buy its access from a tariff. Whenever any party buys a tariffed item, the regulated accounts have to show revenues for the item, or routine audits—internal, regulatory, or independent accounting audits—would uncover the

¹⁸ It can be shown that AT&T's long run marginal cost of the carrier common line charge was $MC = (1 - \text{Market Share}) \cdot P$, where P stands for the tariff rate for the carrier common line.

discrepancy. Regulators in particular are intensely interested and conscientious in preventing and uncovering any such behavior, and the penalties for such behavior would be substantial. Professors Baseman and Warren-Boulton give no clue as to how such a trick could be carried out or could succeed. I dismiss the practical relevance of this scenario. Professor Baumol also understands that argument does not work. (Baumol, ¶ 13)

B. Professor Baumol Regarding Access Charges

45. Professor Baumol has written his comments at a highly abstract level, with little detail, so I find it difficult to tell on which theory and assumptions he bases his conclusions. I am mainly concerned that his comments appear to rely on the naïve price squeeze argument, as signaled by, among others, these sentences:

... where the owner of the bottleneck is unconstrained in the pricing of its bottleneck services [*i.e.*, access], there is the marked danger that it will sell them to its rival on considerably less advantageous terms than it does to itself. If this occurs, obviously the entry of the bottleneck owner into the competitive final product market [*i.e.*, the *interLATA* toll market], can handicap it seriously and even destroy it. (Baumol, ¶ 10)

...

These techniques include ... Vertical price squeezes—that is, raising the price of an essential facility (*i.e.*, access to the local network) high enough in relation to the bundled price of local exchange and interexchange service so that the resulting margin is too small to cover the incremental costs of efficient competitors. (Baumol ¶ 39)

46. To the extent that he is relying on the invalid naïve price squeeze argument, his conclusions and policy recommendations are also invalid.

C. Professor Hall Regarding Access Charges

47. Professor Hall understands the invalidity of the naïve price squeeze argument. (Hall, ¶¶ 82, 191) He even quotes part of my refutation of the argument. (Hall, ¶ 191) However, to criticize a conclusion by Professor Hausman, he misapplies my findings. Professor Hausman's conclusion was based on the knowledge that current access charges exceed the local exchange

carrier's marginal costs of access. Therefore, to increase its access profits, the local exchange carrier with a long distance affiliate will want to expand industry output beyond what it would have been without its long distance entry. In other words, it wants to induce or force lower industry prices. I wrote the above-quoted passage in my declaration to show that a local exchange carrier does not increase access profits if its long distance affiliate takes a given number of toll minutes away from a competitor. Contrary to Professor Hall's impression, this latter proposition does not contradict Professor Hausman's proposition. Indeed, as I explained in my declaration and as I reviewed above, Professor Hausman is correct.

48. Professor Hall claims, "Because of the opportunity cost, the long-distance affiliate will set a price comparable to existing prices and will not have an incentive to deliver significantly lower long-distance prices to the consumer." (Hall, ¶ 191) Similarly, he also says, "[Professor Schmalensee] disposes quickly of the suggestion that a dominant local carrier would use its access cost advantage to offer bargains in the long-distance market." (Hall, ¶ 210) Professor Hall is wrong in that first sentence and misinterprets my findings in the second sentence. There are at least three ways in which he is wrong. First, even though the local exchange carrier gains no access profits if its long distance affiliate simply takes a customer away from a long distance rival, its marginal cost of additional usage is lower than that of rivals. Therefore, in a world with linear prices, its profit-maximizing price would tend to be lower than that of its rivals. This lower price stimulates demand for that customer. Second, non-linear prices are widely used in the long distance industry. With a lower marginal cost than its rivals have, the affiliate would tend to charge marginal prices that are lower than it would if it had higher marginal costs. (Professors Baseman and Warren-Boulton recognize this fact, contradicting Professor Hall. (Baseman and Warren-Boulton, ¶ 30)) Third, the best of all outcomes for increasing the local exchange carrier's access profits would be if the affiliate's competitive pressures induced the rivals to meet the competition, stimulating demand from all customers, whether served by the affiliate or not. All three of these effects would increase economic welfare.

49. Professor Hall also asserts that Professor Hausman "is suggesting that the local carriers sacrifice the revenue they currently earn from access charges." (Hall, ¶ 193) Professor Hall has

this completely wrong. He appears to have temporarily forgotten what he and all other economists know—reducing prices will increase profits if marginal revenue exceeds marginal costs. Further, he has forgotten that use of non-linear pricing schedules can increase profits when price exceed marginal cost.

D. Professors Hubbard and Lehr Regarding Access Charges

50. I regretted finding that Professors Hubbard and Lehr appear to cling to the myth of the naïve price squeeze argument. (Hubbard and Lehr, ¶¶ 92-93) I will not repeat my explanation from above. They are wrong. Although the local exchange carrier has an interest in expanding long distance demand, it cannot increase access profits simply by taking customers away from rivals at their previous level of usage. It increases access profits only by stimulating the customer's usage, which increases economic welfare.

E. Professor Schwartz Regarding Access Charges

51. Professor Schwartz recognizes the validity of the argument that a local exchange carrier entering the long distance market would have an incentive to expand long distance demand. He also considers limitations on this incentive or countervailing forces. Specifically, he says the following (Schwartz, ¶ 65):

- imputation requirements might limit the ability to implement actions consistent with that incentive;
- incumbent long distance carriers entering the local market would have similar incentives;
- BOCs would have a countervailing incentive to raise rivals' costs or degrade their quality for the purpose of *raising* interLATA prices; and
- BOC access margins are falling, so the expansionist incentive is moderating.

Whether imputation requirements would limit or even prevent the ability to stimulate toll demand depends on how they were administered—whether at a rate element level or at an aggregate level. Clearly, a detailed and rigid application of imputation requirements would

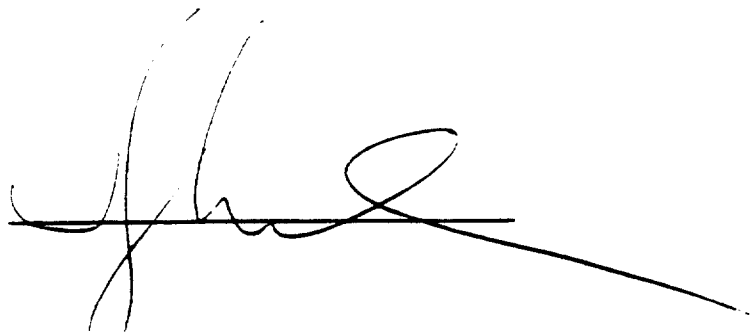
prevent economic welfare gains. I agree with Professor Schwartz that long distance carriers entering the local market would have similar incentives to stimulate market demand. However, I fail to see that this point implies that the welfare-increasing incentive of the BOCs should not be given a chance to operate. We would improve welfare in the industry faster and by a greater amount if the BOCs *and* the long distance carriers vertically integrated rather than if only one class of them did. Finally, although I agree that access margins are falling, that implies a greater, not lesser, urgency to have the BOCs enter the long distance market, while they can still contribute to an increase in the market's economic efficiency through eliminating the double marginalization, as Professor Hausman calls it.¹⁹

F. Professor Shapiro Regarding Access Charges

52. Professor Shapiro appears also to understand that a local exchange carrier's long distance affiliate would tend to stimulate long distance usage in the market. (Shapiro, p. 11) As the others do, however, he ignores the fact that this tendency increases economic welfare and misinterprets it as an undesirable competitive advantage.

¹⁹ I leave to others the role of responding to Professor Schwartz' third point, since that issue was not the focus of my declaration. By omitting discussion of it I do not mean to imply agreement with Professor Schwartz' position.

I declare under penalty of perjury that the foregoing is true and correct. Executed on
November 13, 1997.

A handwritten signature in black ink, consisting of a series of loops and a long horizontal stroke extending to the right.

Reply Declaration of Professor Jerry A. Hausman

1. I am MacDonald Professor of Economics at the Massachusetts Institute of Technology in Cambridge, Massachusetts, 02139. I submitted a previous declaration in this proceeding dated September 26, 1997.

2. In this reply declaration, I first respond to the economists for the IXC's who defend continuing the supra-competitive prices in residential long distance markets by maintaining the prohibition on BOC entry into long distance markets. The arguments of economists for the IXC's have changed little over the past 10 years, and meanwhile residential consumers have paid ten of billions of dollars in overcharges to the IXC's. Despite Congress' explicit intention to increase competition in telecommunications markets, these economists use their same old arguments in an attempt to permanently keep the BOC's from competing with their clients (e.g. Hall for MCI) or ask the Commission to engage in regulatory extortion (e.g. Shapiro for Sprint) until their client IXC's achieve their goals, many of which the Eighth Circuit has rejected as being inconsistent with the Telecommunications Act of 1996. I find it to be quite lamentable that the Commission is once again being urged to maintain policies which are costing consumers billions of dollars per year, do not make economic sense, and are contrary to the Telecommunication Act.¹

1. See Jerry Hausman, "Valuing the Effect of Regulation on New Services in Telecommunications", forthcoming in Brookings Papers: Microeconomics 1997. I estimate that the Commission's actions with respect to

Instead, the Commission should be engaged in an economic analysis to determine if consumers would be made better off if BOCs are permitted to offer long distance, consistent with the public interest standard as I discussed in my first declaration.

3. I also reply to Prof. Marius Schwartz on behalf of the DOJ, who has not changed his position from his first affidavit (May 1997). Prof. Schwartz has no economic model analyzing the costs and benefits of delaying BOC entry. Nor does he quantify the effects. Indeed, Prof. Schwartz makes some elementary mistakes. Thus, Prof. Schwartz does not do the fundamental economic analysis that would allow him to draw a reasoned conclusion about whether further delaying BOC entry to meet the "regulatory perfection" standard that I discussed in my first declaration meets the public interest standard set out in Section 271 of the Telecommunications Act of 1996.

4. Lastly, I reply to lawyers from the DOJ who attempt to rebut my reply to Prof. Schwartz. The regulatory interests of the IXC's have been given precedence by the DOJ lawyers over interests of consumers. I find this approach an incorrect method to advance the public interest.

5. Despite the many disagreements between myself and the affidavits that economists for the IXC's and Prof. Schwartz have submitted, no one has submitted data that overcomes the main point of my first declaration in this proceeding (Hausman Dec., para. 16 ff): SNET is allowed to provide interLATA

refusing to allow the BOCs to provide voice mail cost consumers more than \$10 billion and that the Commission's delay in approving cellular cost consumers over \$100 billion.

long distance service in Connecticut, and SNET's prices are about 17% lower on average than AT&T's prices across residential customers, taking account of all the discount plans that AT&T offers. SNET has gained about 35%-40% of the market in Connecticut demonstrating that many residential customers prefer its service. This market evidence demonstrates the increase in consumer welfare from BOC entry into long distance because consumers benefit from lower prices. On a national basis the increase in consumer welfare is about \$7 billion per year from BOC entry if long distance prices change as they have in Connecticut. This increase in consumer welfare is in the public interest. Likewise, no one has demonstrated that long distance prices are not lower in Canada where ILECs compete in the long distance market than in the U.S. (Hausman Dec., para. 27) Thus, a large gain in consumer welfare would occur if BOCs are permitted to enter the long distance market. This potential gain should be compared to the marginal gain from the "regulatory perfection" standard put forward by the DOJ. Economic analysis demonstrates that overall consumer welfare would increase significantly by BOC entry into the long distance market. Consumer interests should form the basis of a public interest determination, not the interest of the IXC's.

I. Prof. Baumol (AT&T)

6. Prof. Baumol set as his standard that the BOCs should not be allowed to enter the long distance market until "concerns about anticompetitive conduct (concerns underlying the original imposition of the MFJ restrictions) have evaporated." I believe that Prof. Baumol has set the incorrect standard, and that his standard will harm consumers. Prof. Baumol pays no attention to

developments in the U.S. where LECs with bottlenecks (according to Prof. Baumol) have been allowed to enter long distance markets and have brought down consumer prices, e.g. SNET. Nor does he provide an explanation of why long distance competition has worked in most developed countries, e.g. Canada, all of which allow incumbent LECs to provide long distance. Prof. Baumol has ignored this actual empirical experience as well as the market changes brought about by the 1996 Telecommunications Act and has written an essay justifying the line of business restrictions of the old MFJ. Congress has since rejected the approach of the MFJ as has every other country that has considered the question.

7. Prof. Baumol's analysis would lead to a conclusion that vertical integration should not be permitted in the U.S. economy if the upstream firm has market power. Thus, his analysis would forbid Intel from supplying computers (integrated chips and boards which are the essential component of a computer). Yet economists have recognized repeatedly that vertical integration typically leads to lower prices to consumers.² That is not to deny that competitors of Intel constantly attempt to cause the antitrust regulatory authorities to forbid Intel from competing in downstream markets. Yet no antitrust decision has ever stated that vertical integration should not be permitted, solely on the basis that in the upstream market the firm has substantial market power.

2. See the reference in fn. 5 of my first declaration that discusses vertical integration and the "double marginalization" problem. This analysis demonstrates that vertical integration will lead to lower prices to consumers. Prof. Baumol never discusses this well known analysis in his declaration.

8. Only if the firm leverages its market power to cause higher prices in the downstream market are consumers injured.³ Here, downstream prices will be lower for reasons I discussed in my original declaration, paras. 12-14, and the actual experience of SNET and GTE charging lower prices confirms the economic theory. Prof. Baumol seems not to have examined the real world experience of consumer benefits from LEC provision of long distance service in the last decade and a half. Economic learning did not stop with the signing of the MFJ in 1982.

II. Dr. Baseman and Dr. Warren-Boulton (MCI)

9. Dr. Baseman and Dr. Warren-Boulton (BWB) also use the MFJ standard of "effective competition in the markets for unbundled network elements and for retail local exchange services" (pp. 7-8) as their standard for permitting BOC entry into long distance. This standard is inconsistent with the Telecommunications Act of 1996. BWB recite the standard litany for why regulation cannot stop anti-competitive actions. However, again they completely fail to look at actual empirical experience. No IXC, even MCI, has even attempted to show that SNET or GTE has engaged in discrimination or cross-subsidy. Yet SNET has brought 17% lower prices to consumers and gained

3. Prof. Baumol does consider the "one monopoly" claim that all monopoly profits can be gained in the upstream market. Of course, this claim does not make economic sense in the current situation since long distance access prices are regulated. He claims that the BOCs will have an incentive to discriminate in providing access (the MFJ rationale), but after 10 years of equal access regulation experience, the chance that problems will arise is extremely small. Professor Marius Schwartz in his first affidavit for the DOJ (para. 74) concluded that no competitive problems are likely to exist from BOC entry into long distance, and that consumers would benefit from the increased competition, at least in the short run. (paras. 138-139)

35-40% of the long distance market in Connecticut.⁴ BWB simply recite reasons why they believe BOCs will discriminate against MCI, with no empirical support.

10. BWB also discuss the "carrot" rationale for linking a BOC's entry into interLATA market with local competition. However, BWB do not do a public interest determination as to whether consumers would be made better off by BOC entry, as I did in my first declaration. Instead, they merely assume away any benefit from BOC entry. Of course, it is the IXC's economic interest to keep the "carrot" permanently out of reach because SNET's entry and the experience in Canada and other countries have demonstrated that LECs will gain a substantial share of long distance markets when they enter. But what is "good for MCI is not necessarily good for consumers". Without any analysis of the net effect on consumers, the carrot approach is an excuse for maintaining barriers to BOC entry into long distance, thereby harming consumers.

11. In an attempt to dismiss the effectiveness of regulation, BWB claim that the BOCs' entry into the long distance market would require detailed regulation. (p. 15) They seem unaware that the Commission has already decided that the BOCs will be treated as non-dominant interexchange carriers on the basis that detailed additional regulation is not necessary.⁵ Thus, BWB's

4. I discuss later the questions which other IXC economists have raised about the price differences that I observe in Connecticut.

5. Second Report and Order in CC Docket No. 96-149 and Third Report and Order in CC Docket No. 96-61, Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area and Policy and rules Concerning the Interstate, Interexchange Marketplace, FCC 97-142 (Apr. 18, 1997)

discussion of regulation has already been largely rejected by the Commission.

12. BWB next consider long distance access pricing. BWB attempt to re-argue the recent Commission decision on long distance access prices. Indeed, BWB attempt to set a standard that access prices must be reduced before the BOCs are allowed to enter (p. 24). BWB are basically arguing here that a BOC has an "unfair advantage" over an IXC because of the access regulation. However, again they never turn to the issue of whether, given the form of access regulation, BOCs have an incentive to offer lower long distance prices to consumers. They do have this incentive as I discussed in my first declaration, and empirical evidence in Connecticut proves that the theory holds.

13. BWB also fail to note that even if access were set at "economic cost", BOCs would still have an economic incentive (although reduced) to offer lower long distance prices to consumers. Vertical integration creates these incentives which lead to consumer benefit; BWB advance no economic analysis which disputes this fundamental point. Similarly, in considering the consumer benefits from one-stop shopping, BWB again state that the BOCs will have "major advantages in competing for customers who prefer to purchase a bundle of services." (p. 52) BWB are incorrect in this claim because IXCs also have the ability to bundle services as soon as Section 271 relief is granted, and also immediately through resale. BWB are against making consumers better off if MCI faces a disadvantage from its competitors. But competition works when different firms can make use of their competitive advantages to offer preferred products and services to consumers. Consumer should not be harmed

by having to wait for BOC entry into long distance until MCI is convinced that all the BOCs' advantages no longer exist. Furthermore, the BOCs will not have a bundling advantage provided that resale, interconnection, and unbundled network elements are available as required by the checklist.

III. Prof. Shapiro (Sprint)

14. Prof. Shapiro attempts to establish a framework to evaluate the public interest standard without any mention or analysis of benefits from increased long distance competition from BOC entry. He assumes that consumer benefits from local competition will be high (with no supporting evidence); but he fails to assess how effective regulation has been in keeping local exchange services at (or below) their economic cost. Thus, Prof. Shapiro assumes large benefits arising from local exchange competition, and he ignores benefits to consumers from lower long distance prices.⁶ His framework fails to do the appropriate benefit-cost analysis of balancing the effects on consumer welfare from local competition and from long distance competition. This one-sided approach is inconsistent with a valid public interest analysis.

15. Prof. Shapiro does recognize that consumers would benefit from being offered bundled services. (pp. 9-10) However, he argues that "parity in the ability to bundle services" should be attained first. The ability to

6. Prof. Shapiro argues on a priori grounds that "adding another competitor" to the long distance market will bring little benefit. (p. 8) However, Prof. Shapiro fails to consider the empirical evidence of SNET and GTE charging significantly lower prices. His mistake here is his failure to realize that a BOC is not just another competitor; a BOC is a particularly able competitor that has an economic incentive to charge lower prices because of its vertical integration.

bundle using resold services is granted to IXCs once Section 271 entry is granted to the BOCs. IXCs can bundle today through unbundled network elements or other local facilities. Thus, Prof. Shapiro does not advance a valid reason to delay BOC entry. Again he is arguing that a firm should not be allowed to use its competitive advantages to make consumers better off. Prof. Shapiro's "bundling parity" standard (p. 10) demonstrates how consumers are harmed by regulatory protection of competitors such as Sprint. Prof. Shapiro should have concluded that in the absence of "bundling parity" Sprint would be required to lower its prices (as it has done in Canada) which would make consumers better off.⁷ The CRTC (the Canadian regulatory authority) has not found it necessary to protect Sprint in Canada, and consumers have benefitted from lower prices. The public interest standard should be designed to help consumers, not to protect Sprint from competition.

III. Profs. Hubbard and Lehr (AT&T)

16. The primary conclusion of Profs. Hubbard and Lehr (HL) is that long distance markets are "effectively competitive today." (p. 7) HL further conclude that BellSouth's entry into long distance markets will not increase competition, but instead it would threaten competition in long distance markets. (p. 8) Lastly, they state that BellSouth's ability to succeed in long distance competition is "not the relevant question." (p. 10) I reply to these contentions of HL.

7. I discuss Sprint's lower prices in Canada in my first declaration, para. 27.

17. HL consider various structural factors of long distance market such as the number of competitors and AT&T's market share. They also look at the decline in real (inflation adjusted) prices, a fact which is uncontested in this proceeding. But, HL do no price (rate) comparisons for actual customers, such as I did for SNET in Connecticut. If they had done so, they would have found that SNET's prices are lower.

18. HL do an incorrect comparison in Figure 3 when they consider the real price of long distance. They include all switched long distance service which includes large businesses, small businesses, and residential consumers. Business have received lower prices, while residential customers have not benefitted nearly as much. Indeed, in Figure 4 real consumer prices fell by only 24% of which about 17.9% is the effect of inflation. Thus, nominal prices fell by only a little over 1% a year during this period. Furthermore, since nominal access prices decreased by 20.8%, or 4.6% per year, over this same period and AT&T has claimed repeatedly that access costs are 40-50% of its overall costs, decreases in access rates explain more than 100% of the decrease in residential long distance prices, using HL's AT&T data. (HL in Figure 7 compute that access is about 36% of AT&T long distance revenue and access is a significantly higher proportion of economic cost, given the large margins in long distance.) Thus, AT&T's residential long distance prices increased once the effect of access prices are netted out, contrary to what HL claim for overall long distance prices.

19. Given that SNET offers lower prices, the conclusion should be that residential long distance prices are not effectively competitive. Otherwise,

how can large LECs who are allowed to offer long distance offer significantly lower prices? HL also do not compare US long distance prices with Canadian long distance prices although I demonstrated that Canadian prices are lower. Indeed, HL never consider the main economic reason that LECs offer lower prices: the two margins factor that I discussed in my first declaration. HL's only response to Connecticut is to speculate that the price discounts may not be "long-term". (p. 63) Thus, they want to prevent customers from benefitting from the \$6-7 billion per year that I computed because the benefit may not be "long-term"!

20. HL do not analyze SNET's prices for a range of residential customer usage patterns and compare them to AT&T's prices, as I did in my first declaration, because the outcome would be unfavorable. HL also do not analyze the effect of SNET's one second increment billing (which they recognize) compared to AT&T's one minute billing increment, which I demonstrated in my first affidavit has a significant effect. (Hausman Dec., para 19) Instead, HL claim that some price plans by the IXCs offer lower prices than SNET for some customers at some times of day. (p. 70) HL never calculate an average price difference offered to SNET customers. Furthermore, they neglect another important economic factor. HL refer to the importance of consumer sovereignty (p. 28), but fail to explain why consumers have given SNET a 35-40% share of long distance in Connecticut if long distance competition is "vigorous" competitive as they claim. (p. 30) Consumer choice demonstrates that when SNET has offered lower long distance prices, consumers have chosen SNET to the point where SNET is the second largest long distance provider in Connecticut.

21. Similarly, after offering long distance for 18 months in its

territories, GTE has also become the second largest long distance provider. Consumers vote with their dollars. A significant proportion of consumers have demonstrated that they prefer to buy long distance service from their LEC when lower prices are offered. Yet, HL find it to be in the "public interest" to refuse to let consumers vote with their dollars in a similar way in other states.

22. HL attempt to respond to my analysis that if regulation has been effective, expected gains from "regulatory perfection" are likely to be limited. Their only calculation which leads to a claimed savings of \$15 billion per year (p. 74) is admittedly "back of the envelope" (fn. 106) and is absurdly wrong because the number of minutes it is based on is too small by a factor of at least 3-4 times. Residential customers make many more minutes of calls than HL incorrectly assume they make. HL never consider the cost of these local calls which must be considered in any calculation of possible benefits. HL "make up a number" to try to claim large benefits, but the number is wrong.

23. HL agree with me that the U.S. is the only country not to allow LECs to provide long distance service. (pp. 66-67) They then say that the U.S. is unique with respect to its requirements of unbundling and resale. They are actually incorrect here since both Australia and Canada have similar regulations, although the details differ. However, HL miss my main point. Long distance prices are lower in Canada than the U.S. HL did not dispute my economic analysis here; they just ignore the fact. HL do not discuss why U.S. consumers benefit from paying higher long distance prices than their Canadian

neighbors.

IV. Prof. Hall (MCI)

24. Prof. Hall discusses vertical integration, but he fails to recognize the efficiency effect of vertical integration which has long been known to economists. Using Prof. Hall's approach Intel would not be allowed to vertically integrate, but the antitrust laws have never attempted to stop vertical integration. Indeed, most economists agree that large benefits to consumers have arisen from Intel's vertical integration. Prof. Hall never discusses the international experience where every other country except the U.S. has allowed vertical integration of its LEC. The outcome has been considerably more local competition in countries like the U.K. (cable companies providing about 7% of local residential service) and Australia (Optus the second long distance company provides an HFC network to residential customers). Thus, other countries have permitted vertical integration and have more local competition for residential customers than does the U.S. Prof. Hall has no answer in either economic theory or market experience to this international experience.

25. Prof. Hall attempts to minimize the benefits of one-stop shopping.⁸ (p. 23) But market experience including the experience in Connecticut demonstrates that consumers prefer one-stop shopping. Thus, Prof. Hall argues against consumer sovereignty, a principle accepted by almost all economists.

8. Interestingly, HL for AT&T admit to the consumer benefits from one stop shopping.